DOCUMENT RESUME

ED 251 170 PS 014 656

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TITLE Are the Long Term Effects of Early Childhood Education Effective Even Though the Short Term Effects Seem Ineffective?
PUB DATE [82]
NOTE 12p.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; *Early Childhood Education; *Educational Assessment; *Outcomes of Education; *Program Evaluation; *Research Design; Research Needs
IDENTIFIERS *Perry Preschool Project; Project Head Start; *Westinghouse Ohio Study

ABSTRACT

This investigation examines two contrasting evaluations of early childhood education: the Westinghouse-Ohio University study and the Ypsilanti Perry Preschool Project. The Westinghouse study concluded that Head Start experience had very little, if any, academic value for participating children, whereas the Perry Preschool Project concluded that preschool experience was indeed valuable. Since the two studies were very different, it is asserted that comparing them is like comparing apples and oranges. Specifically, the two programs varied in form and content and were very different in their goals. The Perry Preschool study was a carefully controlled experiment with very low teacher/pupil ratios, weekly home visits, expert teachers recruited for their certification in preschool teaching, and a capable research director. In contrast, the Westinghouse-Ohio University study assessed Head Start programs, which involved thousands of children, fairly large pupil/teacher ratios, no regularly scheduled home visits, and few specially certified preschool teachers. The majority of Head Start programs were not full-year, half-day as were programs studied by the Perry Preschool researchers; rather, they were global summer-only, full-day programs with very little direction from the federal government. In addition, whereas the Perry Preschool study attempted to discover differences between experimental and control groups, the Head Start programs were evaluated in terms of whether or not participants achieved at the middle class academic level. Concluding remarks point out many unanswered questions about early childhood education programs. (RH)

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"ARE THE LONG TERM EFFECTS OF EARLY CHILDHOOD EDUCATION EFFECTIVE EVEN THOUGH THE SHORT TERM EFFECTS SEEM INEFFECTIVE?"

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Introduction

Early childhood education is simply the idea of putting pre-school youngsters into a school environment. There have been two areas that have interested social scientists concerned with this kind of education. One is psychological and is not the concern of this paper. This area tries to measure the psychological effects of separating a young child from its mother. The other area of early childhood education, of great concern to the public and many social scientists, is the measurement of the academic results of early childhood education. Do economically deprived children attending government sponsored Head Start programs really have a head start academically? Do the children of wealthy middle class parents really do better in school because of their enrollment in expensive pre-school programs?

This study and evaluation of early childhood education is one that beautifully illustrates the problems of study and evalaution that sociologists must deal with. The problems stem from the fact that variables related to specific kinds of human behavior are so numerous that it is almost impossible to find which crucial variable is responsible for which kind of behavior.

Unlike scientists working in biology or chemistry who can hold all variables constant but one, and then link differences in their samples to the difference in the variable, sociologists attempting to attribute behavior to one variable run into the fact that the behavior they are attempting to measure may result from any number of environmental or biological factors. Thus, those attempting to measure the efficacy of early childhood education have problems determining if the difference between a group of children who have had early childhood education vs. those who have not are indeed due to the early childhood education itself or is it due to the training their mothers received because of their enrollment in early childhood education, or is it due to the better diet they received in the program or perhaps none of these variables explain the difference. Moreover, what if they do not differ? Is that due to their poor schooling after early childhood education, the program's ineffectiveness, or perhaps lack of emphasis on cognitive skills in the global programs that were true of many Head Start early childhood centers. This paper will examine two evaluations of early childhood education, the Westinghouse-Ohio University study which discovered that this kind of training had little if any academic value and the Yipslianti Perry Preschool project which discovered that it did have some value.

The Westinghouse-Ohio University Study

The Westinghouse-Ohio University evaluation of Head Start was published in June 1969. Head start is an early childhood education program that endeavored to "prepare disadvantaged

children for first grade and bring their academic skills up to middle class levels" (underlining added) (Smith, 1979, p. 53). It is perhaps the most massive early childhood education program ever attempted. For 1969 it cost the U.S. government more than 300 million dollars. Interestingly enough, it was the least controversial program launched by the War on Poverty. Though Head Start was a branch of Community Action Program, which itself along with Job Corp initially engendered a large amount of controversy, Head Start received the blessing and cooperation of all the bureaucracies it involved.

In 1968 the Westinghouse Learning Corporation and Ohio University received a contract from the Office of Economic Opportunity to study the cognitive effects of Head Start using Head Start graduates of 1965, 1966, and 1967 who were then entering the 1st, 2nd and 3rd grades. The researchers were to select an ex. post facto control group for comparison with the Head Start students. The control group was matched by elegibility for Head Start, sex, age, ethnicity, family SES and kindergarten attendence, i.e. if the Head Start graduate had attended kindergarten his matched colleague should have also attended, etc.

The researchers drew two random samples for their evaluation of Head Start's effectiveness. The first sample was of Head Start Centers which at that time were either summer programs or full year programs. Seventy percent of the sample were summer programs and the other thirty percent were full year. One hundered centers were drawn at random and another two hundred

were drawn as replacements for the original hundred should this prove necessary. Of these 225 were screened and a sample of 104 finally selected and confirmed. The reasons such large numbers were dropped was first because some centers were so small that they could not provide a control group, i.e. either all or most of the children had attended Head Start in these centers. Second, some centers were not in existence long enough so that they had graduates who were entering the third grade. Third, some centers would not allow the researchers to administer tests to their students as the Westinghouse tests might interfere with the school system's tests. A second random sample of children who had attended Head Start was made from 104 chosen centers. A sample of eight students were selected for each category with two alternates. These students were carefully matched with non attending Head Start students for the previously mentioned variables of sex, age, ethnicity, etc. All students received a battery of tests including the Metropolitan Readiness Test, the Stanford Achievement Test, and the Illinois Test of Psycho linguistic ability. Other tests scored were Children's Self Concept Index, A Classroom Behavior Inventory, and the Children's Attitudinal Range Indicator. All of these last three tests were non-verbal tests and they attempted to measure respectively self esteem, a teacher rating of achievement motivation and attitudes toward family peers and society.

The analysis strongly indicated that cognitively and attitudinally there were no effective differences between the Head Starters and their controls. The Metropolitan Readiness

test which is only administered to first graders as a reading readiness evaluation did have a statistically significant difference at the .05 level of confidence. However, the difference was so small that the senior author of the report concluded that, "it requires heroic assumptions to imagine it is going to improve the life chances of these children or indeed their performance in school" (Cicirelli, 1970 p. 124). In short, Head Start was not going to change the academic performance of economically disadvantaged children to that of middle class children.

The critics blamed the study, the sampling and the method of training used in Head Start. This training was global rather than centered on academic achievement. Further analysis of the evaluation ~~was in all~~ proved to be fruitless since no matter how the figures were manipulated the results were what the researchers had claimed. It is true that Head Start did marvelous things medically and nutritinally but that, after all, was not its' purpose. What is amazing is that despite this devastating negative report the program goes merrily on its way because of some deep seated feeling that it must be beneficial even if it does little to help its' students academically.

The Ypsilanti Perry Preschool Project

It is interesting to note that the Ypsilanti Project (1962) started before Head Start (1965) and that Smith and Bissel attribute its' success to its focusing on improving academic ability rather than the global approach of Head Start that included efforts to improve the physical, social, emotional and

intellectual well being of its' clients (Smith 1970 p. 60). The project was initiated to give economically disadvantaged children training so they could function better in a school environment. Weikart had tried to change the school setting to benefit these disadvantaged children but had met with little cooperation from the Ypsilanti School System. He therefore decided to work with preschoolers in an effort to train them to achieve more in school despite a rather inflexible school system.

The Ypsilanti Project developed over a five year period. Ypsilanti is a town of about 30,000 located 30 miles west of Detroit in an industrial complex. Most of the participants in the project were economically poor black children living in one section of Ypsilanti which was served by Perry School. From 1962 until 1966 small numbers of three and four year olds were chosen as an experimental group and a control group to test various ideas about early childhood education. The first wave, as Weikart calls them, was composed of four year olds who had one year of pre-school training followed by kindergarten and then regular school (Weikart 1978 p. 10). All succeeding waves were admitted to the program at age three and had two years of pre-schooling followed by kindergarten and regular school. All participants in the program were selected on the basis of an SES evaluation that used factors of father's education, occupation and household density. If fathers were not present mother's education and occupation were used. All children were tested with the Stanford Binet and only those who registered an I.Q. between 50 and 85 were accepted. The reason for keeping the

I.Q.'s at this low level was that the State of Michigan funded projects for mentally handicapped children.

Selection of the control vs. the experimental group was made by rank ordering the children according to their Stanford Binet scores and then making up an odd numbered list and an even numbered list. The lists were then modified where needed to equalize sex and SES distribution. A flip of a coin decide which group would be experimental and which control. As succeeding waves of children entered the study modifications were made so the any child who had an older sibling in a previous experimental wave would be included in the new experimental group. This was done because part of the program included weekly ninety minute visits to mothers of preschool teachers and it was also felt that a child in the treatment program would have a diffusion effect on his or her siblings. One other factor entered into the selection of experimental vs. control group and that was working mothers. Since children only attended preschool half a day mothers had to have some means of arranging for child care for the remainder of the day. Thus the final control group had 31% of the mothers working while the experimental group only had 9% its mothers who worked. In no wave were there ever more than 15 children and the teacher pupil ratio was 1:6 for all waves." (Weikart1 1978, p. 21) In all there were 58 children in the experimental group and 65 in the control group.

Throughout the years of the study and even afterward countless tests were given to the project children. Fourth grade evalautions indicated that the experimental group did better on

the California Achievement Test Total, also in reading and in language than the control group, using the .05 level of confidence. Perhaps the most important results concern the longitudinal studies carried out after all of these subjects had finished high school. Here we find that the experimental group spent fewer years in special education, fewer of them dropped out of high school, fewer of them were arrested by age 19, more of them entered job training or college after high school, more of them were employed at age 19 and finally more of them were completely self supporting at age 19. The High Scope Educational Foundation which was organized for this study equates these successes into dollars and cents and argues that programs like theirs can save the tax payers millions of dollars over the long run.

CONCLUSION

Comparing these two studies of early childhood education is like comparing apples and oranges. The Ypsilanti study was a carefully controlled experiment with very low teacher pupil ratio, weekly home visits, expert teachers recruited for their certification in pre-school learning and a research director who was able to conceive and hold the whole thing together. On the other hand they were working with children who registered between 50 to 85 on the Stanford Binet I.Q. test. In all fairness it should be pointed out that Jencks believes that children under the age of six do not have very stable I.Q.s. In contrast to Ypsilanti, Head Start was a massive program involving thousands of children, fairly large pupil to teacher ratios, no regularly

scheduled home visits, and few specially certified pre-school teachers. It is also important to note that the majority of the programs were not full year half day like Ypsilanti but summer only full day type global programs with very little direction from Washington. I was privileged to attend and speak at the first year Head Start banquet in Colorado in 1965 and I was truely amazed at the variety of goals and programs that the Head Start directors had conceived and tried to carry out.

If Ypsilanti and Head Start Programs differed in form and content they were very different in their goals. Nowhere does it appear that Ypsilanti thought it could raise the academic abilities of its subjects to middle class norms. Instead they held rigidly to discovering differences between their experimental and control groups. In Head Start, on the other hand, they were evaluated on the basis of searching for academic improvement which would show their participants had achieved at the middle class academic level. Perhaps a longitudinal study of early Head Starters would reveal that although they failed to achieve middle class scholastic norms they did finish high school in greater numbers, repeated fewer classes, were not found in special education classes as often, etc.

In conclusion, we must ask more questions then we have answered. Is early childhood education a success or failure? If it is a success medically and nutritionally could we obtain the same results with out the schooling? What is the role of teacher parent ninety minute, weekly home visitations for the success of the Ypsilanti program? What is really intriguing is the fact

that hundreds of wealthy middle class parents are busily striving to enter their three year olds in expensive pre-school programs because they feel that it is the only way they can assure their entrance into the Ivy League universities fifteen years from now! Is this wasted effort? In short and again, is early childhood education ~~a success~~ an academic success or failure?

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